

REMARKS

The last Office Action in the above-identified application and the references cited by the Examiner have been carefully considered. The claims have been amended in a sincere effort to define more clearly and more specifically features of Applicants' invention which distinguish over the art of record.

Claims 7-15 and 17-19 have been rejected under 35 U.S.C. 101. More specifically, Claims 7-9 and 17 are considered as being directed towards software *per se*. Claims 7-9 and 17 have now been cancelled.

With respect to Claims 10-12 and 18, the Examiner contends that the claims recite a "machine-readable medium", although this language is not found anywhere in the claims. Nevertheless, to overcome the examiner's rejection of the claims under Section 101, Claims 10-12 and 18 have now been amended to read a "computer-readable storage medium". Clearly, the claims as rewritten cover only statutory subject matter, as the storage medium is now limited to only being capable of being readable by a computer. Accordingly, it is respectfully urged that Claims 10-12 and 18, as now amended, obviate a rejection under Section 101 and are in proper form.

With respect to Claims 13-15 and 19, the Examiner's rejection of these claims under Section 101 is respectfully traversed. The claims clearly define the method as not involving a mental process but rather being performed by the control system of a communication robot, as stated in Claims 13-15 and 19. Accordingly, Claims 13-15 and 19 identify the apparatus (i.e., the control system) that accomplishes the method steps. Therefore, it is respectfully urged that Claims 13-15 and 19 obviate a rejection under Section 101 and are in proper form. Nevertheless, if, after considering Applicants' remarks in this respect, the Examiner requires the Applicants to insert any additional language into Claims 13-15 and 19, it is respectfully requested that he contact the undersigned attorney at the telephone number given below.

Claims 1-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0156751 (Takagi, et al.) in view of U.S. Patent Application Publication No. 2003/0014159 (Inoue, et al.) and U.S. Patent Application Publication No. 2002/0137425 (Furumura). The Examiner's helpful comments with respect to the claims and the Takagi, et al., Inoue, et al. and Furumura published applications found on pages 4-7 of the Office Action have been carefully considered. Accordingly, the claims have been amended in a sincere effort to define more clearly and more specifically features of Applicants' invention which distinguish over the cited references.

The Examiner, in the Office Action, contends that the Takagi, et al. published application includes the storage means, a behavior decision means and a generation means set forth in the claims. However, Applicants respectfully wish to point out that the Takagi, et al. published application discloses a method for determining action of a robot that is directed for detecting external and internal information of the robot, and producing one behavior selected on the basis of the detection result. The Takagi, et al. reference does not disclose that the action of the robot is selected by the user, nor does the robot described in the Takagi, et al. reference have a displayer which displays a list of the plurality of behaviors in a user-selectable manner based on the information stored in the first storage, as defined by the claims pending in the application.

Additionally, in the Takagi, et al. reference, the reproductive motion information is not the reproductive motion information generated based on the history of the behavior decided by a decider, as now more specifically set forth in the amended claims (please see amended independent Claims 1, 10 and 13, where it is recited that the generator or the generation step generates the reproductive motion information on the basis of the plurality of input history information accumulated by the accumulator or by the accumulation step and emotional expression decided by the decider or the behavior decision step).

Next, with respect to the Furumura published application, the Examiner contends that the edit device disclosed in the Furumura application has the display means for displaying a list of the plurality of behaviors in a user-selectable manner as set forth in the pending claims of the

subject application prior to the amendments to the claims made herein. Certainly, the Furumura reference discloses that the icons corresponding to movements and behaviors to be performed by the pet robot disclosed therein are displayed to be selectable by the user on the behavior model edit screen; however, the edit device, edit method, recorded medium and robot disclosed in the Furumura reference are entirely different from the claimed invention as a whole.

More specifically, the Furumura device is for editing a program of behavior models of the pet robot, and thus does not have the generator which generates reproductive motion information for interactive actions to be performed by the communication robot based on the history of the behavior decided by the behavior decider or behavior decision step, as now more specifically set forth in independent Claims 1, 10 and 13, as now amended, of the subject application.

The Examiner also contends that the Inoue, et al. published application includes the generator set forth in the claims of the subject application. However, the Inoue, et al. reference only discloses that the pet robot stores the history of use by the user formed in a temporal axis direction, and determines a next action based on the history of use, thus making it possible to adapt the life rhythm of the pet robot to the life rhythm of the user.

The Examiner contends that the Inoue, et al. published application teaches generating reproductive motion information based on a history of the behavior, but as can be understood from the description “the pet robot 1 can start and shut down according to the history of use of the pet robot 1 by a user, thus making it possible to adapt life rhythm of the pet robot 1 to the life rhythm of the user, so that the user can get a larger sense of affinity and entertainment property can be improved” (please see paragraph [0108] of the Inoue, et al. specification), the history referred to in the Inoue, et al. reference is for persistently indicating the history of the use of the pet robot 1 by the user, and is quite different from the “history” indicating selective designation and decision of behaviors of Applicants’ invention set forth in independent Claims 1, 10 and 13, as now amended. In other words, Applicants respectfully urge that even if the Inoue, et al. reference is applied to the Takagi, et al. reference, the technique of the cited references and the

technique of generating reproductive motion information for interactive actions to be performed by the communication robot based on a history of the behavior decided by the behavior decider or the behavior decision step, set forth in independent Claims 1, 10 and 13, as now more specifically amended, of the subject application, are quite different from each other.

Thus, since none of the Inoue, et al. reference, the Takagi, et al. reference and the Furumura reference discloses the generator or generation step which generates reproductive motion information for interactive actions based on the history of the behavior decided by the behavior decider or the behavior decision step, as now more clearly and specifically set forth in amended independent Claims 1, 10 and 13 of the subject application, it is respectfully urged that the claimed invention patentably distinguishes over the combination of the Inoue, et al., Takagi, et al. and Furumura references, taken alone or in combination, and are allowable.

Claims 2-6, 16 and 20 depend directly or indirectly from independent Claim 1, as now amended, and, therefore, incorporate all of the limitations set forth in amended Claim 1. Accordingly, it is respectfully urged that Claims 2-6, 16 and 20 patentably distinguish over the references of record for the same reasons submitted with respect to amended Claim 1 and are allowable.

Furthermore, Claims 11, 12 and 18 depend directly or indirectly from independent Claim 10, as now amended, and, therefore, incorporate all of the limitations of amended Claim 10. Accordingly, it is respectfully urged that Claims 11, 12 and 18 patentably distinguish over the references of record for the same reasons submitted with respect to amended Claim 10.

Additionally, Claims 14, 15 and 19 depend directly or indirectly from independent Claim 13, as now amended, and, therefore, incorporate all of the limitations of amended Claim 13. Therefore, it is respectfully urged that Claims 14, 15 and 19 patentably distinguish over the references of record for the same reasons submitted with respect to amended Claim 13.

Furthermore, with respect to the patentability of Claims 10-12 and 18, the computer-readable storage medium defined by these claims is substantially the same as the control system

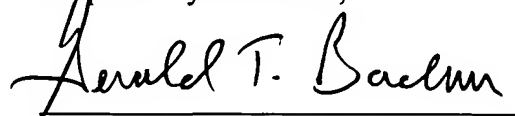
defined by Claims 1-3 and 16, except for the Claims 10-12 and 18 defining a storage medium (the steps of the program are similar to the structure of the control system set forth in Claims 1-3 and 16), and thus are patentable for the same reasons that Claims 1-3 and 16 are patentable.

In addition, the method defined by Claims 13-15 and 19 includes steps which are substantially the same as the structure of the control system set forth in Claims 1-3 and 16 and thus are patentable for the same reasons that Claims 1-3 and 16 are patentable.

Furthermore, irrespective of its dependency respectively on Claims 1, 10 and 13, each of Claims 3, 12 and 15 include either a determiner or a determination step that determines whether or not the emotional expression selected by the user is appropriate to the selected behavior, and does not permit the emotional expression to be added to the behavior if the determiner determines that the emotional expression is not appropriate to the behavior. The Examiner cited the Takagi, et al. published application for teaching the capability of preventing conflict or unreasonable behavior, but the Takagi, et al. reference only discloses a technique that, in order to prevent any unreasonable or impossible posture or other interference between the units, the units are aligned with each other to manage the posture and motion. This is quite different from the invention defined by Claims 3, 12 and 15, in which a determiner or a determination step is recited. For this further reason, it is respectfully urged that Claims 3, 12 and 15 patentably distinguish over the art of record and are allowable.

In view of the foregoing amendments and remarks, entry of the amendments to Claims 1-6, 10-14, 16, 18 and 20, favorable reconsideration of Claims 1-6, 10-16 and 18-20 and allowance of the application with Claims 1-6, 10-16 and 18-20 are respectfully solicited.

Respectfully submitted,

A handwritten signature in black ink, reading "Gerald T. Bodner". The signature is written in a cursive style with a horizontal line underneath the name.

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